

## Claims:

1. An apparatus for use with a milking machine comprising one or more teat cups and a vacuum source providing a vacuum in the teat cups, for collecting a  
5 small volume of liquid for cold storage, the apparatus comprising:  
a fluid collection receptacle having an opening for collecting fluid;  
a housing for the fluid collection receptacle comprising an inlet for receiving the liquid from the one or more teat cups and a port for providing a vacuum within the housing from said vacuum source; and  
10 means for retaining the opening of the receptacle to receive liquid via the housing inlet.
2. An apparatus according to claim 1 wherein the housing inlet for receiving the liquid from one or more teat cups comprises a conduit protruding into the  
15 housing and means for retaining the receptacle so that the receptacle is retained about the opening of the inlet to receive fluid therefrom.
3. An apparatus according to claim 2 wherein the receptacle is a flexible fluid collection bag comprising a collar defining the opening.  
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4. An apparatus according to claim 2 wherein the retaining means retains the collar about the inlet conduit.
5. An apparatus according to claim 4 wherein the dimensions of the collar  
25 are greater than the adjacent portion of the inlet conduit to allow the vacuum applied to the housing to be transferred from the vacuum port to said inlet for receiving liquid.
6. An apparatus according to claim 1 wherein the housing inlet comprises a  
30 conduit extending into the housing and said fluid collection receptacle comprises a flexible bag having a collar defining an opening and wherein said means for retaining the opening of the receptacle cooperates with the collar to retain the collar so that the inlet extends into the flexible bag through the opening.

7. An apparatus according to claim 5 wherein the collar is sufficiently rigid to retain its shape when retained about the inlet conduct by the retaining means.
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8. An apparatus according to claim 1 wherein the fluid collection receptacle is a flexible bag.
9. An apparatus according to claim 7 wherein the flexible bag is a lay flat bag comprising two sides joined by a heat seal.
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10. An apparatus according to claim 6 wherein the housing is sufficiently rigid to retain its shape under the vacuum from said milking apparatus.
11. An apparatus according to claim 1 wherein the receptacle has a volume in the range of from 500 ml to 50 litres.
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12. An apparatus according to claim 1 wherein the receptacle has a volume in the range of from 5 litres to 40 litres.
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13. An apparatus according to claim 1 wherein the receptacle has a volume in the range of from 10 to 25 litres.
14. An apparatus according to claim 1 wherein the housing comprises a lid comprising the top wall and a body comprising side and bottom walls.
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15. An apparatus according to claim 14 wherein the lid comprises said fluid inlet comprising a conduit for receiving liquid extending down from said wall to provide an inlet port within the housing and further comprises said port for providing a vacuum.
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16. An apparatus according to claim 15 wherein the conduit is provided with retaining means for cooperating with the opening of the receptacle.

17. An apparatus according to claim 16 wherein the receptacle comprises a flexible bag having a relatively rigid collar defining said opening and the collar comprises a flange adapted to cooperate with the retaining means to retain the collar for receiving liquid from the inlet.
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18. An apparatus according to claim 1 wherein the fluid collection receptacle is a flexible bag having a relatively rigid collar defining the opening and wherein the bag comprises an internal pocket to allow sampling of the bag contents.
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19. An apparatus according to claim 18 wherein the internal pocket is formed by a heat seal extending from an edge of the bag.
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20. An apparatus according to claim 18 wherein the pocket has a volume of no more than 5% of the total volume of the flexible bag.
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21. A milking system comprising an apparatus for collecting a small volume of liquid such as colostrum, the system comprising:
- a plurality of teat cups;
  - a vacuum source for applying a vacuum to the teat cups for collecting

20 liquid;

  - a reservoir for collecting relatively large volumes of milk; and
  - an apparatus according to claim 1 for collecting relatively small volumes of liquid.
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22. A milking system according to claim 21 further comprising a pressure oscillation means for providing pulsating vacuum to the teat cups and a vacuum line downstream of the apparatus for collecting relatively small volumes of liquid.
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23. A milking system according to claim 21 further comprising a case for receiving liquid filled bags for freezing to provide a thickness of less than 20 cm.

24. An apparatus according to claim 1 when used in collection of liquid selected from the group consisting of ungulate colostrum, hyperimmune colostrum and specialty milks.